

REMARKS

Claims 1, 2 and 4-8, 11-23, 25, 27, 28, 30 and 31 are pending in the subject application. Claims 3, 9, 10, 24, 26, 29 and 32-46 have been cancelled. Claims 15-23, 25, 27, 28, 30 and 31 are withdrawn from consideration.

Claims 1, 2, 4-9 and 11-13 stand rejected under 35 U.S.C. §102(b) or under 35 U.S.C. §103(a) over U.S. Patent No. 5,114, 584 (Sheckler et al.). This rejection is respectfully traversed.

Sheckler et al. discloses a filter body comprised of at least about 75 wt.% of molecular sieve material and from about 9 to about 20 wt.% of nylon. All pores of said molecular sieve are smaller than about 4 Angstroms. This pore size definition relates to the primary pore volume. In Sheckler et al., no figures or information are given for the secondary pore structure. Nevertheless, there are statements in Sheckler et al. about porosity, namely in example 1 column 12, lines 26 to 30, where a pressure drop over a shaped body is discussed. This corresponds to a quite open secondary pore structure with large macroscopic pores allowing substantial amounts of fluid travelling through. This observation is supported by the Abstract describing bodies with surprisingly low densities of "about 10 to about 25 grams per cubic inch," which corresponds to  $0.61\text{g/cm}^3$  to  $1.52\text{g/cm}^3$ . Where a porous body possesses a density below  $2\text{g/cm}^3$ , a macro-porous structure is present (i.e., macropores are larger than 10 microns) allowing readable pressure drops over such bodies.

In comparison, the porous body of the present invention possesses a meso-porous structure does not allow for passage of fluid or gas through the material. The corresponding bodies would have an unlimited pressure drop. The presently disclosed bodies in the present application possess a secondary pore structure that provides desirable absorption properties. The secondary pore volume recited in claim 1 is formed with pores having diameters of 4 to 3000  $\mu\text{m}$ , i.e., only small interstices, which provides dense bodies having increased water pick up. There is no disclosure in Sheckler et al. regarding secondary pore volume.

Moreover, Sheckler et al. discloses an adsorbent body having particle sizes of the molecular sieves greater than 250 $\mu$ m (col. 4, lines 21-31). Because large particle sizes lead to large voids between arrangements of particles, this also supports the presence of large macro-porous secondary pore structures in the Sheckler et al. adsorbent body, i.e., of channels allowing a fluid to pass completely through the structure.

Since Sheckler et al. does not disclose the pore structure of the material recited therein, and the density of the material is quite low, the material would not necessarily possess the pore structure of the subject invention. Thus, the subject-matter of claims 1, 2, 4-8 and 11-13 are not anticipated by the disclosure of Sheckler et al.

There is no mention or suggestion in the June 20, 2008, Office Action as to why Sheckler et al. inherently possesses the claimed property (i.e., the secondary pore volume recited in the subject claims). Inherent anticipation requires that the missing descriptive material is “necessarily present,” not merely probably or possibly present in the prior art. *Trinteo Industries v. Top U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) quoting *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

Additionally, facts asserted to be inherent in the prior art must be shown by evidence from the prior art. *Elan Pharmaceuticals, Inc. v. Mayo Foundation for Medical Education and Research*, 304 F.3d 1221, USPQ2d 1292 (Fed. Cir. 2001). *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (criticizing the “hindsight syndrome wherein that which only the inventor taught is used against its teacher”).

As above-mentioned, Sheckler et al. describes a porous material that possesses secondary pore volume that allows fluid to pass through it (i.e., macro-porous channels). The teachings of Sheckler et al. do not even remotely hint as to the pore size of the secondary pore volume.

Moreover, since the body set forth in Sheckler et al. is prepared using large molecular sieve particles, the channels set forth therein are macoporous and allow for passage of fluid completely through the body, which also is evidenced by the very low density of the body. Thus, Sheckler et al. does not describe absorbent bodes that inherently possess the instantly claimed secondary pore volume.

Accordingly, it is submitted that the subject matter of claims 1, 2, 4-8 and 11-13 is not inherently disclosed by the above-identified references, and Applicants respectfully request withdrawal of the §102 rejection.

Claims 1, 2, 4-8 and 11-13 also stand rejected over 35 U.S.C. §103(a) over Sheckler et al. This rejection is respectfully traversed.

As above-mentioned, Sheckler et al. is completely silent regarding the size of pores for the secondary pore volume of the adsorbent body described therein. In addition, Sheckler et al. also teaches the artisan to prepare adsorbent bodies having large pores. Thus, the disclosure of Sheckler et al., would not provide either the teachings or the motivation for the artisan to prepare an adsorptive body having the secondary pore volume recited in the present claims.

The Examiner bears the burden of establishing a *prima facie* case of obviousness, *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995), *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ 2d 1443, 1444 (Fed. Cir. 1992). Only if this burden is met does the burden of coming forward with rebuttal argument or evidence shift to the applicant. *Rijckaert*, 9 F.3d at 1532, 28 USPQ2d at 1956. When the references cited by the examiner fail to establish a *prima facie* case of obviousness, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

The combination of elements in a manner that reconstructs the applicant's invention only with the benefit of hindsight is insufficient to present a *prima facie* case of obviousness. There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. That

knowledge cannot come from the applicant's invention itself. *Diversitech Corp v. Century Steps, Inc.*, 850 F.2d 675, 678-79, 7 USPQ2d 1315, 1318 (Fed. Cir. 1988); *In re Geiger*, 815 F.2d 686, 687, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987); *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1147, 227 USPQ 543,551 (Fed. Cir. 1985).

In the instant case, Applicants respectfully submit that the June 20, 2008, Office Action does not set forth any statements of record to supplement the silences of the cited reference. Moreover, there has been no suggestion or motivation set forth to this Office Action that would lead one of ordinary skill in the art to the claimed invention. In particular, on page 3 of the June 20, 2008, Office Action it is stated that:

For claims 1 and 2, Sheckler's molecular sieve or zeolite reads on the "porous functional solid" of the claimed invention. Since Sheckler teaches a porous filter body, the nylon powder in the molding mixture inherently forms a polymer matrix, which necessarily has a porous structure for providing access to the adsorbing molecular sieve particles. Sheckler is silent about the pore diameter of the polymer matrix (secondary pore diameter). However, since Sheckler teaches the same subject-matter for the same end use, a workable pore diameter of the polymer matrix is deemed to be either anticipated, or obviously provided by practicing the invention of the prior art, dictated by the same end use.

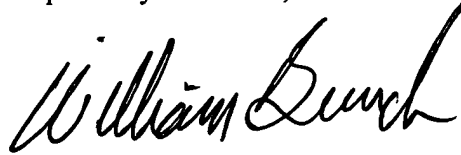
As above-mentioned, Sheckler et al. is completely silent regarding secondary pore volume of the adsorbent body described therein. Moreover, one of ordinary skill in the art, after reviewing of Sheckler et al., would not have been motivated to form the instantly claimed secondary pore volume in the adsorbent body described therein since the teachings of Sheckler et al. lead one to macroporous or large channels of pore sizes. In addition, there are no teachings in Sheckler et al. that would enable the artisan to obtain adsorbent bodies having the instantly claimed pore sizes.

Therefore, Applicants submit that no *prima facie* case of obviousness has been set forth in previous Office Action.

Accordingly, it is submitted that the subject matter of claims 1, 2, 4-8 and 11-13 are not rendered obvious by Sheckler et al. Applicants respectfully request withdrawal of this rejection.

In view of the above remarks, Applicants earnestly solicit the withdrawal of the rejections set forth in the June 20, 2008 Office Action and notification to that effect in the form of a Notice of Allowability.

Respectfully submitted,

A handwritten signature in black ink that reads "William D. Bunch". The signature is written in a cursive style with a large, stylized 'W' and 'B'.

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Dated this 19th day of September 2008.

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